

**Before the
Public Service Commission of South Carolina**

Docket No. 2022-89-G

**Application of Piedmont Natural Gas Company, Incorporated
for an Adjustment of Rates and Charges**

**Direct Testimony and Exhibits
of
Brian R. Weisker**

**On Behalf Of
Piedmont Natural Gas Company, Inc.**

1 **Q. Mr. Weisker, please state your name and business address.**

2 A. My name is Brian R. Weisker. My business address is 4720 Piedmont
3 Row Drive, Charlotte, North Carolina.

4 **Q. By whom and in what capacity are you employed?**

5 A. I am a Senior Vice President and Chief Operations Officer of Piedmont
6 Natural Gas Company, Inc. ("Piedmont" or "Company"). In this capacity,
7 I am responsible for the operation of Piedmont's natural gas systems.

8 **Q. Please describe your educational and professional background.**

9 A. I received a Bachelor of Sciences degree from the United States Naval
10 Academy in 1994 and an MBA degree from Tulane University in 2001.
11 From 1996 through 2002, I worked in the United States Navy as a
12 Division Officer, an Assistant Professor of Naval Science and as a
13 Navigation/Operations Department Head. From 2002 through 2006, I
14 worked at Cinergy as a Manager. In 2006, I joined Duke Energy as a
15 Station Manager. In 2014, I became General Manager of Carolina West
16 Outages & Maintenance Services. In 2015, I became Vice President of
17 Coal Combustion Products Operations & Maintenance. In 2018, I became
18 Vice President of Natural Gas Operational Excellence at Piedmont. In
19 January 2020, I assumed my current role.

1 **Q. Have you previously testified before the Public Service Commission of**
2 **South Carolina (“Commission”) or any other regulatory authority?**

3 A. I have not previously testified before this Commission, but I presented
4 information to this Commission in February of 2021 concerning
5 Piedmont’s construction practices in response to the Commission’s Notice
6 of Generic Proceeding in Docket No. 2012-278-G issued on November 30,
7 2020. I have testified before the North Carolina Utilities Commission and
8 the Kentucky Public Service Commission and have sponsored testimony
9 before the Tennessee Public Utility Commission and the Indiana Utility
10 Regulatory Commission.

11 **Q. What is the purpose of your testimony in this proceeding?**

12 A. My testimony in this proceeding will address: (1) Piedmont’s ongoing
13 efforts and activities undertaken in compliance with the requirements of
14 federal pipeline safety regulations promulgated by the Pipeline and
15 Hazardous Materials Safety Administration (“PHMSA”); (2) Piedmont’s
16 projected spending on PHMSA compliance and other capital projects over
17 the coming years in light of changing PHMSA regulatory requirements;
18 (3) the importance of Piedmont’s Rate Stabilization Act (“RSA”)
19 mechanism based upon the Company’s past and projected capital
20 expenditures to meet PHMSA’s requirements; (4) Piedmont’s capital
21 investment in the Robeson County liquefied natural gas (“LNG”) project

1 and other large capital projects; and (5) our continuing efforts to reduce
2 methane leakage from our system.

3 **Q. Are you sponsoring any exhibits to your testimony?**

4 A. Yes. I am sponsoring the following exhibits:

5 Exhibit __ (BRW-1): PHMSA Expenditures

6 Exhibit __ (BRW-2): Future PHMSA Compliance Expenditures

7 **Q. Were these exhibits prepared by you or under your direction?**

8 A. Yes.

9 **PHMSA Compliance Activities**

10 **Q. Please provide an overview of Piedmont's recent PHMSA compliance**
11 **activities.**

12 A. As the Commission is aware, Piedmont is subject to expansive regulatory
13 requirements imposed by PHMSA under its Transmission Integrity
14 Management Program ("TIMP") and Distribution Integrity Management
15 Program ("DIMP") regulations. These regulations are issued under the
16 authority of Subparts O and P of Part 192 of the regulations of the United
17 States Department of Transportation and are fully binding on Piedmont as
18 a provider of natural gas transmission and distribution services. These
19 regulations require that Piedmont engage in extensive assessment, testing,
20 planning, verification, record-keeping, documentation, inspection, and
21 quality assurance activities with respect to its 77 miles of transmission
22 main (and appurtenant facilities) and its 3,930 miles of distribution main

(and appurtenant facilities) located in South Carolina. In compliance with these regulations, Piedmont continues to engage in a broad range of compliance activities with respect to its transmission and distribution facilities.

Q. Please provide a summary of these recent activities.

A. As of December 31, 2021, Piedmont expended approximately \$8.9 million since March 31, 2021, the date through which utility plant was updated in the Company's most recent RSA proceeding, on a variety of projects designed to ensure that its system remains safe and fully compliant with applicable regulatory requirements. A summary of these projects is attached hereto as Exhibit_(BRW-1). We anticipate completing capital projects during the three months ending March 31, 2022, of an additional \$1.8 million. The activities associated with these capital projects include the mitigation or repair of flaws and defects detected through smart-pig inspections, the removal, repair, replacement, and/or upgrade of certain pipeline segments where necessary to comply with PHMSA regulations either because of administrative documentation deficiencies or because they are non-compliant with current prevailing standards for modern pipeline facilities, and pipeline casing remediation and corrosion control.

1 **Q. Can you elaborate why Piedmont's compliance with PHMSA**
2 **regulations results in significant costs?**

3 A. Yes. Much of the cost is attributable to the fact that as the Company
4 engages in a granular analysis of its transmission facilities through smart-
5 pig inspections, it often finds anomalies that need to be addressed. These
6 are not necessarily leaks, but every time Piedmont finds a dent, evidence
7 of corrosion, a weak spot in the pipe, or a failure in cathodic protection,
8 the Company is required to analyze the risk associated with the anomaly
9 and devise mitigation measures. Piedmont also does not have complete
10 control over the costs of undertaking specific projects because much of the
11 PHMSA compliance work is conducted by outside contractors who bid for
12 the opportunity to do such work. Because the entire industry has ramped
13 up to comply with PHMSA requirements over the last seven years or so,
14 competition for qualified contractors has increased, which has had an
15 inflationary impact on the costs of this work.

16 **Q. Have customers benefitted from Piedmont's PHMSA compliance**
17 **work?**

18 A. Yes, and so has the public at large. Piedmont's system is much safer and
19 more transparent due to our compliance with these federal requirements.

20 **Q. What has contributed the most to system safety?**

21 A. Any time the Company identifies and remedies a potential physical system
22 vulnerability, system safety is improved when that vulnerability is

1 addressed. Piedmont's new electronic systems, as they continue to be
2 implemented, allow the Company to manage its compliance activities
3 more efficiently with most of the data Piedmont needs to engage in such
4 management at its fingertips. This is a vast improvement from the early
5 days of PHMSA compliance when most of the Company's records relating
6 to system construction, maintenance, and repair were in paper format.

7 **Q. How does Piedmont prioritize TIMP and DIMP remediation**
8 **requirements for discovered anomalies?**

9 A. Piedmont employs a sophisticated risk analysis system that analyzes the
10 type of anomaly in terms of the consequences of failure versus the
11 likelihood of failure. The Company then prioritizes mitigation measures
12 associated with that anomaly accordingly.

13 **Q. Are you satisfied with the progress Piedmont is making and is**
14 **Piedmont currently compliant with its obligations under PHMSA**
15 **regulations?**

16 A. Yes. The Company has made huge progress in terms of system safety and
17 integrity and is currently compliant with its obligations under PHMSA.

18 **Q. Does that mean the TIMP and DIMP work that Piedmont has been**
19 **heavily engaged in is coming to an end?**

20 A. No. By design, the TIMP and DIMP requirements of PHMSA are cyclical
21 and iterative. As such, the Company will continue to engage in the

1 inspection, assessment, remediation, and documentation cycle with respect
2 to both transmission and distribution integrity on an ongoing basis.

3 **Piedmont's Anticipated Ongoing PHMSA Expenditures**

4 **Q. Are PHMSA's regulations static or do you anticipate changes to those**
5 **regulations in the future?**

6 A. PHMSA's regulations are subject to revision and change. In fact, they
7 were amended in October 2019 for Gas Transmission Line Safety and in
8 November 2021 for Gas Gathering Line Safety, and the industry expects
9 PHMSA to issue additional rule modifications relating to Gas
10 Transmission Line Safety later this year. These amendments substantially
11 expand obligations currently in effect and require maximum allowable
12 operating pressure reconfirmation and materials verification for
13 transmission pipelines. In addition, these amendments expand
14 assessments outside of High Consequence Areas into Moderate
15 Consequence Areas, significantly increasing the miles of transmission
16 pipeline to be assessed. Piedmont anticipates that the PHMSA rules may
17 continue to change over time and experience has shown that they are not
18 likely to become less stringent.

19 **Q. Does Piedmont have a projection of the cost of PHMSA compliance**
20 **activities?**

21 A. Yes. During the three-year period ending December 31, 2025, Piedmont
22 expects to incur approximately \$20 million of capital expenditures related

1 to PHMSA compliance activities. A summary of this activity is attached
2 hereto as Exhibit_(BRW-2).

3 **The Importance of Piedmont's RSA Mechanism for PHMSA Compliance**

4 **Q. Please describe the importance of the RSA mechanism to Piedmont's**
5 **efforts to ensure compliance with PHMSA pipeline safety and**
6 **integrity requirements in an economical manner.**

7 A. As shown on Exhibit_(BRW-1) and (BRW-2), these investments in a safe
8 and compliant system have been and will continue to be significant.
9 Because of the annual cost recovery opportunity associated with these
10 projects under the RSA, Piedmont does not face the same degree of
11 challenges created by the impacts of regulatory lag between rate cases,
12 allowing the Company to focus on the continuing safety and reliability of
13 the Piedmont system.

14 **Capital Investments**

15 **Q. Has Piedmont incurred significant non-PHMSA related capital**
16 **expenditures since its last RSA filing?**

17 A. Yes. Piedmont estimates that its South Carolina capital expenditures will
18 be approximately \$58 million during the one-year period from the date
19 through which plant was updated in the Company's most recent RSA
20 proceeding through its proposed March 31, 2022 update period for this
21 proceeding. The majority of these necessary projects will not generate a
22 near-term increase in revenues.

1 **Q. What was the largest such infrastructure project?**

2 A. The largest project was the recently completed Robeson County LNG
3 facility which provides significant enhancements to system reliability and
4 operational flexibility that are needed to meet Piedmont's customers'
5 demand for natural gas during periods of extreme cold weather, also
6 known as peak demand. The tank will hold LNG that approximates the
7 heating value of one million dekatherms of natural gas and will be an
8 addition to Piedmont's South Carolina plant in service of approximately
9 \$39.3 million.

10 **Q. How critical is the Robeson LNG facility for Piedmont to meet its**
11 **peak demand?**

12 A. The Robeson County LNG plant is absolutely critical to Piedmont's ability
13 to serve its design day demand in the Carolinas, particularly in view of the
14 cancellation of the Atlantic Coast Pipeline project. Without the Robeson
15 County LNG plant, Piedmont's available natural gas supply would have
16 fallen short of its peak day demand during the upcoming winter of 2022-
17 2023. Customer growth created the need for additional natural gas supply
18 on a peak day. The Company reviewed several options for meeting this
19 looming shortfall including procuring additional firm transportation rights
20 on the interstate pipeline system combined with additions to our system
21 infrastructure. Our review indicated that the Robeson County LNG plant

1 was the most cost-effective option to support our projected peak demand
2 needs.

3 **Q. In addition to the Robeson LNG project, please provide additional**
4 **capital projects that Piedmont has completed or expects to complete**
5 **prior to March 31, 2022.**

6 **A.** A few examples of significant investments made to serve our growing
7 customer base are as follows:

8 **New pretreatment and liquefaction systems at the Huntersville LNG**
9 **facility** – The Huntersville LNG facility, which became operational in the
10 early 1970s, has been critical to Piedmont’s ability to serve its design day
11 demand in the Carolinas. Over time, the natural gas composition received
12 at this facility has changed as more natural gas obtained from shale
13 formations was introduced into the interstate pipeline system with
14 different properties from the more traditional Gulf Coast supply. The
15 composition of this new source of natural gas led to operational problems
16 associated with the facility’s original pretreatment systems. The new
17 pretreatment systems will be able to correctly treat the current and
18 forecasted gas to be received at the plant for liquefaction. In addition, the
19 liquefaction system for the Huntersville LNG facility was designed to fill
20 the LNG tank in 200 days. The current operating environment does not
21 allow Piedmont to consistently have 200 days to fill the tank, so the new
22 liquefaction system was designed to fill in 100 days. The new liquefaction

1 system also uses a nitrogen-based refrigeration cycle instead of a
2 hydrocarbon gas cycle to lower the plant's carbon footprint. The
3 modernization of the Huntersville LNG facility is projected to add
4 approximately \$8.6 million to our South Carolina plant in service.

5 **Q. Given that the Robeson County and Huntersville LNG facilities are**
6 **located in North Carolina, how do they provide value to Piedmont's**
7 **customers in South Carolina?**

8 A. Piedmont's procurement of interstate natural gas pipeline capacity is done
9 in a manner that assumes delivery to North Carolina and South Carolina
10 customers jointly. One virtual point of delivery is utilized to cover
11 interstate pipeline deliveries to both States. Piedmont's three LNG plants,
12 all located in North Carolina, are used to meet customer needs reliably on
13 the coldest days. As LNG is utilized in North Carolina, more interstate
14 capacity is available for delivery to South Carolina customers. The LNG
15 plants are a less expensive source of capacity to meet customer needs
16 during cold weather than the acquisition of additional interstate capacity.
17 If Piedmont had pursued the more expensive option of adding interstate
18 capacity, those costs would have been shared between North Carolina and
19 South Carolina customers. Therefore, the extra capacity provided to the
20 Carolinas system by the operation of the LNG plants benefits all
21 customers in the jointly managed systems.

1 **Q. Can you describe other significant projects that Piedmont has**
2 **completed since Piedmont’s last RSA update?**

3 **A. Installation of a new regulator station at the Spartanburg**
4 **Transcontinental Gas Pipe Line Company, LLC (“Transco”)**
5 **Interconnect in conjunction with the Line 353 de-rate project –**
6 Piedmont’s existing Line 353 in Spartanburg was de-rated from a
7 transmission line to a distribution line. In addition, a 16” distribution line
8 was installed in parallel to supplement the feed to Piedmont's existing
9 Spartanburg distribution systems. The existing Cedar Springs regulator
10 station, at Piedmont’s interconnect with Transco, and Piedmont’s Lucerne
11 Drive regulator station were decommissioned and replaced with a single
12 regulator station near our interconnection with Transco. Completing this
13 project eliminated the need to install In-Line Inspection (“ILI”) launchers
14 and receivers as well as retrofitting Line 353 to accept ILI tools.
15 Additionally, this project allowed for the consolidation of the 70-year-old
16 Lucerne Drive regulator station and the 60-year-old Cedar Springs
17 regulator station into one new regulator station. The capital expenditure
18 for this project was approximately \$12.2 million.

Methane Leakage Mitigation

Q. Is Piedmont aware of the concerns that methane leakage associated with the production, transmission, and distribution of natural gas?

A. Yes. I am very aware of these concerns pertaining to the natural gas industry.

Q. Do you share these concerns with respect to Piedmont's natural gas utility operations?

A. Piedmont is committed to safe, environmentally responsible operations and developing a pathway towards a clean energy future. The Company has committed to achieving net-zero methane emissions from its natural gas business by 2030. Piedmont recognizes its responsibility to take meaningful action to reduce methane emissions in its own gas distribution system and it has pilot work underway to evaluate new technologies in support of this goal. My responsibilities at the Company include the steps Piedmont is continuing to take to reduce and eliminate the potential of methane leakage on Piedmont's system. I am also aware that the Company is working with all its stakeholders to help design policies that accelerate the reduction of methane emissions while continuing to provide affordable service to our customers.

1 **Q. Please elaborate on Piedmont's current actions to reduce methane**
2 **emissions.**

3 A. There are numerous ongoing efforts in this regard. The Company is
4 moving forward with the adoption of new technologies to monitor and
5 measure methane emissions. This includes a pilot currently underway
6 using satellite technology to capture methane leaks in coordination with
7 on-the-ground field crews to validate, enabling faster identification of
8 leaks. Thus far, the project is yielding promising results. There are also
9 other pilot programs underway at the Company. For example, the
10 Company is preparing to test real-time monitoring and measurement
11 devices at select compressor stations, regulator stations and LNG
12 facilities. Other efforts aimed at reducing methane emissions include the
13 deployment of cross-compression technology to eliminate the venting or
14 flaring of natural gas into the atmosphere during certain operational
15 activities and increasing leak surveys from every five years to every three
16 years, which has resulted in the Company finding and fixing methane
17 leaks faster. Piedmont has adopted best operating practices and damage
18 prevention initiatives to reduce the unintended escape of methane when
19 third parties damage its pipeline facilities. Furthermore, Piedmont is an
20 active member of ONE Future, a coalition of industry members
21 representing the entire natural gas supply chain, working together to

1 reduce the methane intensity of the natural gas supply chain to 1% or less
2 by 2025.

3 **Q. Do you have anything to add to your testimony?**

4 A. No, not at this time.

Exhibit_(BRW-1)

Piedmont Natural Gas Company, Inc.
SCPSC Docket No. 2022-89-G
South Carolina Operations

Exhibit_(BRW-1)

Cumulative Cost of PHMSA Compliance Activity since the Company's Last Annual RSA Filing through the end of the Test Period for this Rate Case
(April 1, 2021 through December 31, 2021)

<u>Actual Capital Expenditures:</u>		
1	Corrosion Control	\$ 263,013
2	Casing Remediation	-
3	Distribution Integrity	953,413
4	Transmission Integrity	7,649,485
5	Total	<u>\$ 8,865,911</u>

Exhibit_(BRW-2)

Piedmont Natural Gas Company, Inc.
 SCPSC Docket No. 2022-89-G
 South Carolina Operations

Exhibit_(BRW-2)

Projected PHMSA Compliance Activity Capital Expenditure Amount by Project Category

		<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>Total</u>
1	Corrosion Control	\$ 650,731.0	\$ 414,340.0	\$ 350,115.0	\$ 1,415,186.0
2	Casing Remediation	231,674.0	1,449,345.0	1,573,863.0	3,254,882.0
3	Distribution Integrity	462,666.0	580,068.0	85,411.0	1,128,145.0
4	Transmission Integrity	2,569,219.0	1,744,404.0	9,608,796.0	13,922,419.0
5	Gross Total	\$ 3,914,290.0	\$ 4,188,157.0	\$ 11,618,185.0	\$ 19,720,632.0